Methods for Treating Blood Coagulation Disorders

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method of treating an individual having a blood coagulation defect (*e.g.*, hemophilia A, hemophilia B), comprising administering to the individual an effective amount of a DNA vector encoding modified Factor VII (FVII), wherein the modified Factor VII leads to generation of Factor VIIa *in vivo*. In a particular embodiment, the invention pertains to a method of treating an individual having a blood coagulation defect comprising administering to the individual an effective amount of a nucleic acid encoding a modified FVII wherein the modified FVII comprises a signal which codes for precursor cleavage by furin at the activation cleavage site of the modified FVII. The invention also relates to a method of treating an individual having a blood coagulation disorder comprising administering to the individual an effective amount of a nucleic acid encoding the light chain of human FVII and a nucleic acid encoding the heavy chain of human FVII operably linked to a leader sequence. Compositions, expression vectors and host cells comprising nucleic acid which encodes a modified Factor VII, wherein the modified Factor VII leads to generation of Factor VIIa *in vivo* is also encompassed by the present invention.